

Results

Crash Reductions (Using 5.33 Year Before and After Periods)

Total Crashes:	72.4% Reduction	(From 58 crashes to 16 crashes)
Target Crashes*:	78.8% Reduction	(From 52 crashes to 11 crashes)
Target Injury Crashes:	73.3% Reduction	(From 30 crashes to 8 crashes)
Target PDO Crashes:	86.4% Reduction	(From 22 crashes to 3 crashes)
AADT:	12.2% Increase	(From 19,600 vehicles to 22,000 vehicles)

\* Target Crashes include all Frontal Impact Crashes.  
The Frontal Impact Crash types considered are as follows: Left Turn-Same Roadway, Left Turn-Different Roadways, Right Turn-Same Roadway, Right Turn-Different Roadways, Head On, and Angle.

The Treatment Location appears to have had a substantial decrease in both Total and Target Crashes from the before to the after period. By restricting through traffic movements from the side streets, the safety treatments appear to have dramatically reduced the number and severity of frontal impact crashes.

Location Photos Taken on May 3, 2005



For the complete project evaluation report and reports on other projects, please go to:  
<http://www.ncdot.org/doh/preconstruct/traffic/Safety/ses/projects/completed.html>

North Carolina Department of Transportation  
Traffic Engineering and Safety Systems Branch  
Traffic Safety Systems Management Section  
Safety Evaluation Group

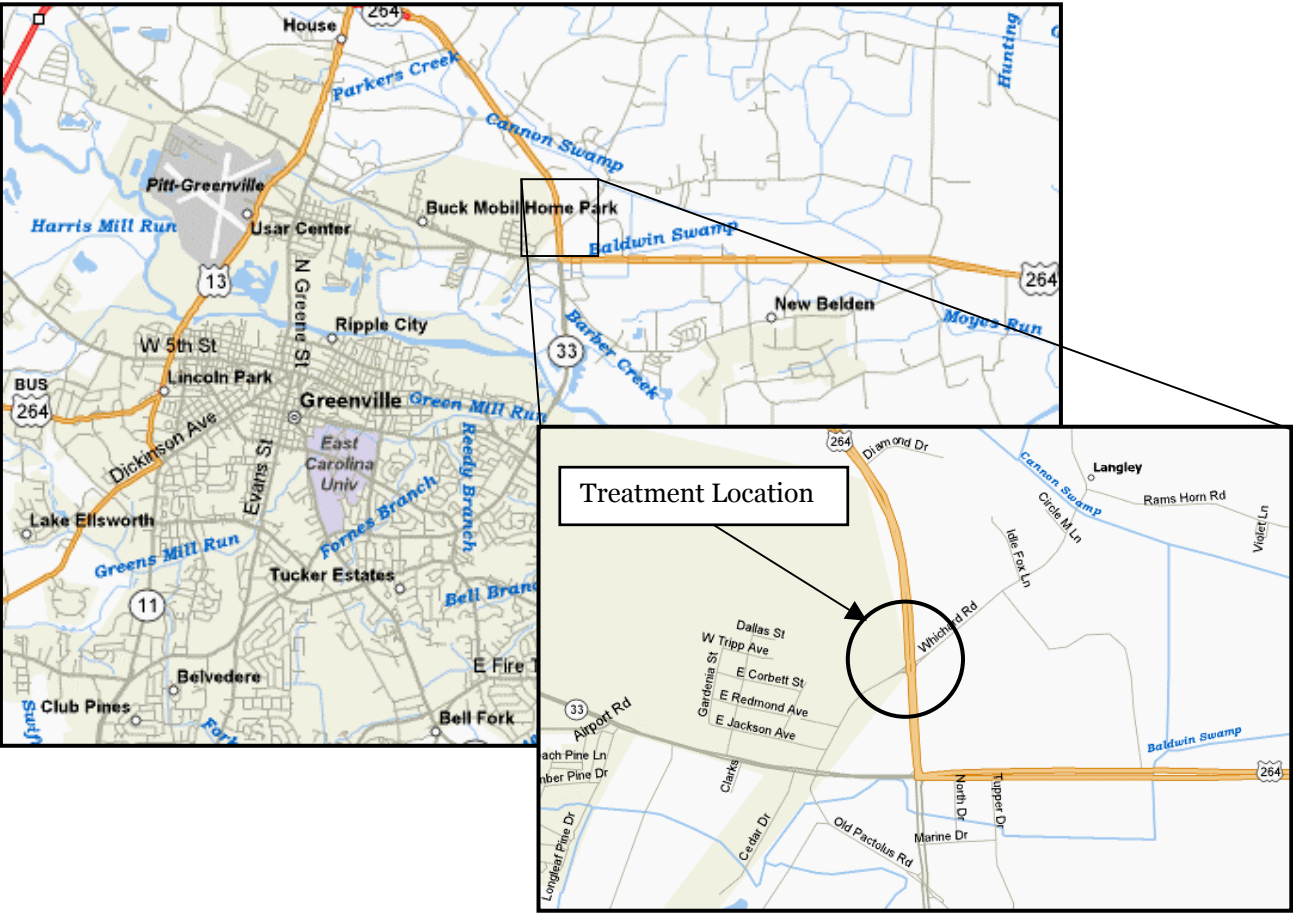
Evaluation of Spot Safety Project # 02-94-216

The Directional Crossover Installation at the Intersection of  
US 264 and SR 1523 (Whichard Rd) in Pitt County

The subject intersection is located near the city of Greenville. Traffic Engineering staff originally recognized this location as needing safety improvements because it had experienced 33 Total Crashes in the three year time period between February 1, 1992 through January 31, 1995. Of these, 30 crashes were frontal impact type crashes. The Total Crashes resulted in one fatality, two class-A injuries, five class-B injuries, and 27 class-C injuries.

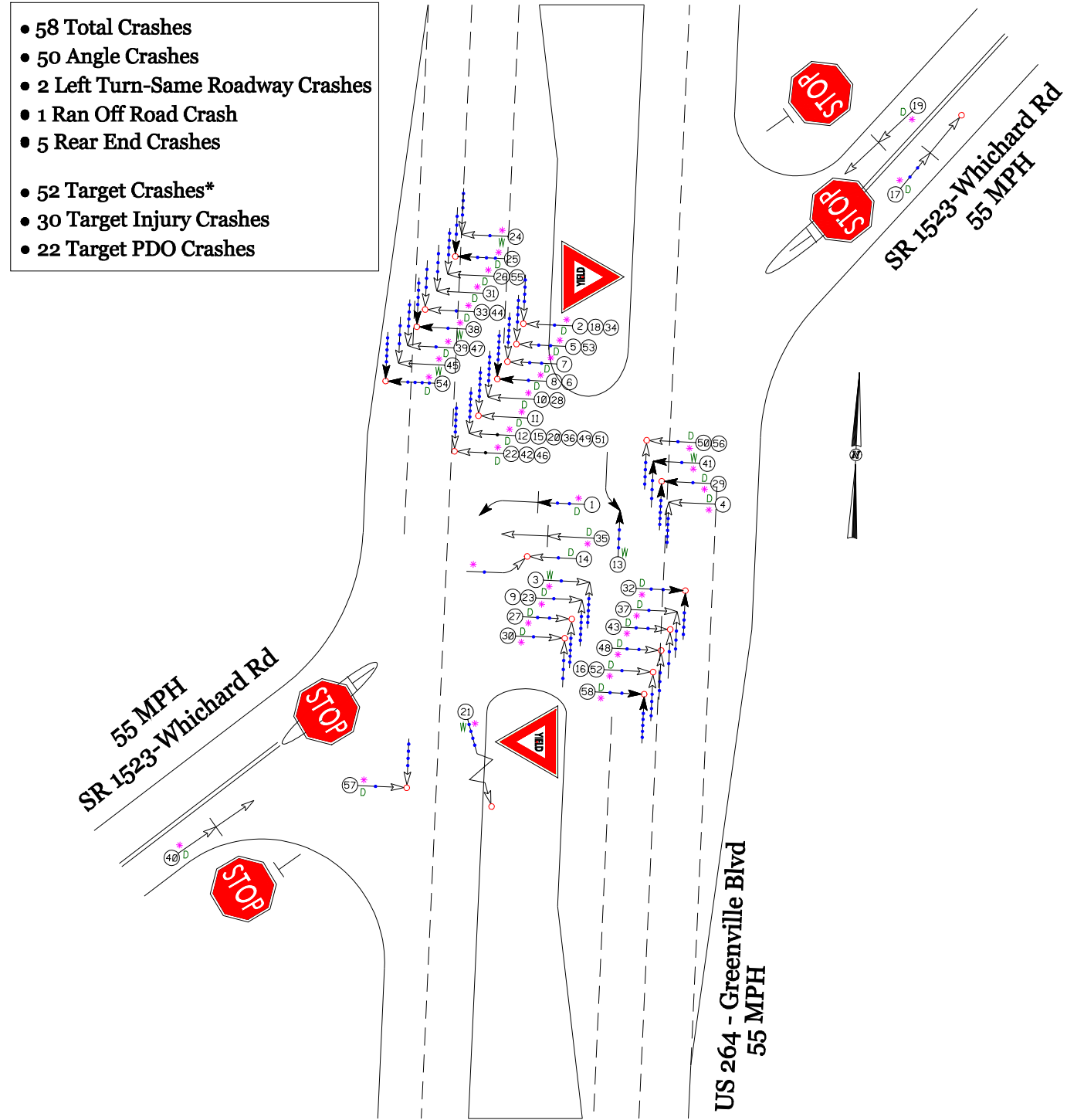
Raised pavement islands in the crossover were designed to allow only westbound Whichard Rd vehicles to turn left onto southbound US 264. The safety improvements were intended to alleviate the angle crash pattern at the intersection by preventing through movements from both side street approaches. Prior to the improvements, vehicles entering the intersection from Whichard Rd were having difficulty making safe movements across the intersection due to insufficient gaps in traffic.

The project was completed on April 30, 1999 at an estimated cost of \$65,000.



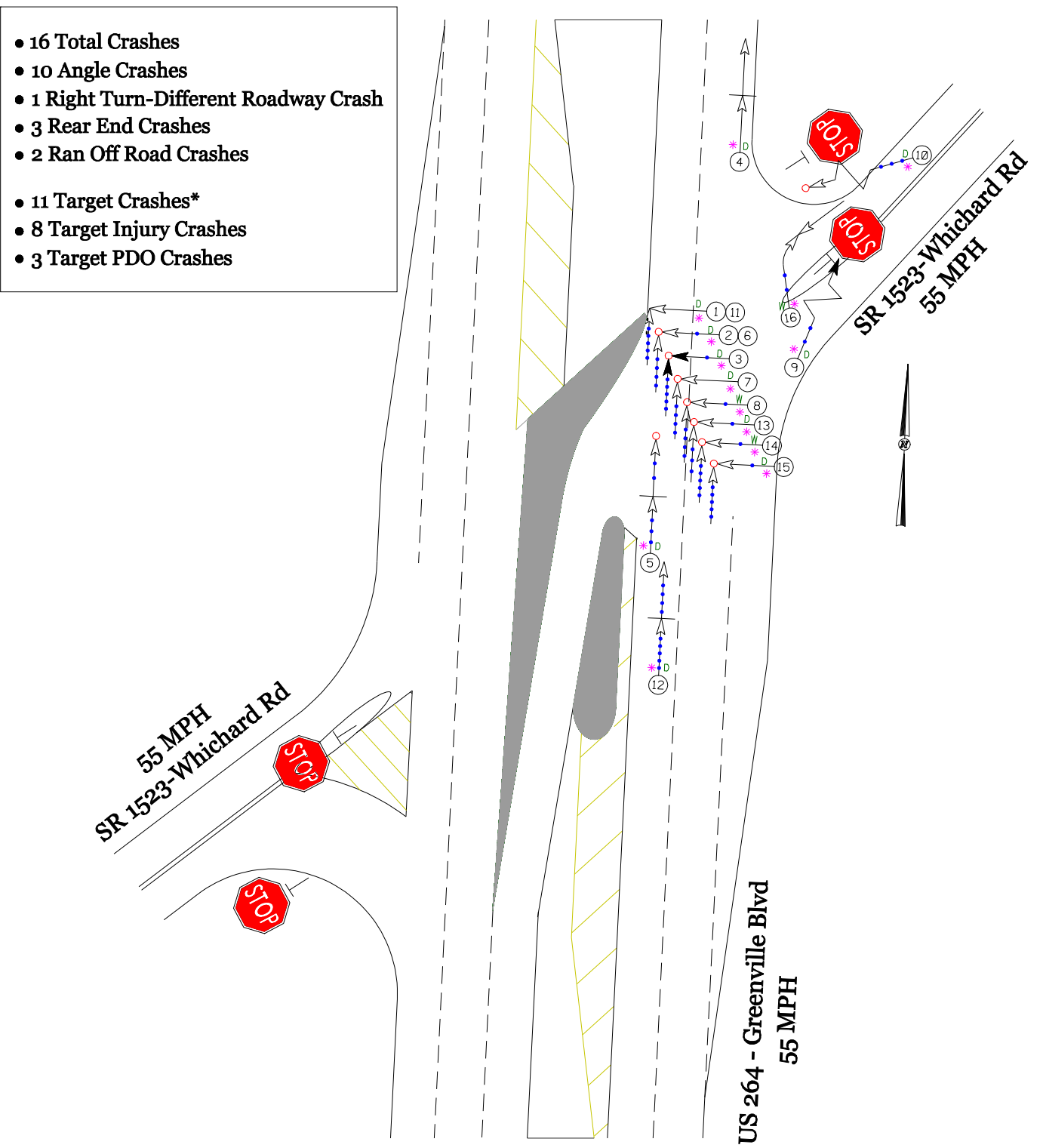
# Before Period Collision Diagram

November 1, 1993 through February 28, 1999  
(5.33 Years of Crash Data)  
1996 ADT = 19,600



# After Period Collision Diagram

July 1, 1999 through October 31, 2004  
(5.33 Years of Crash Data)  
2002 ADT = 22,000



\* Target Crashes are deemed correctable by the treatment.  
For this evaluation, Target Crashes include all Frontal Impact Crashes such as:  
Left Turn-Same Roadway, Left Turn-Different Roadways, Right Turn-Same Roadway,  
Right Turn-Different Roadways, Head On, and Angle